President.—G. K. Gude, F.Z.S.

Vice-Presidents.—H. O. N. Shaw, B.Sc., F.Z.S.; T. Iredale; J. R. le B. Tomlin, M.A., F.E.S.; A. S. Kennard, F.G.S.

Treasurer.—R. Bullen Newton, F.G.S.

Editor.—B. B. Woodward, F.L.S., etc.

Secretary.—A. E. Salisbury.

Six other Members of the Council.—A. Reynell; C. Oldham, F.L.S.; Major M. Connolly; H. Woods, M.A., F.G.S.; Rev. A. H. Cooke, Sc.D., M.A., F.Z.S.; H. H. Bloomer, F.L.S.

On the motion of Dr. Bowell, seconded by Dr. Boycott, a unanimous vote of thanks was passed to the retiring Officers and Members of the Council, the Auditors, and the Scrutineers.

## ORDINARY MEETING.

FRIDAY, 13TH FEBRUARY, 1920.

G. K. GUDE, F.Z.S., President, in the Chair.

Mr. Henrich Christian Sell was elected to membership of the Society.

The President then delivered his address on "The Armature of

Land Mollusca ".

On the motion of Dr. Cooke, seconded by Mr. Crick, a vote of thanks to the President for his address was passed, with a request that he would allow the same to be printed, as far as possible, in extenso in the "Proceedings" of the Society.

## ORDINARY MEETING.

FRIDAY, 12TH MARCH, 1920.

G. K. GUDE, F.Z.S., President, in the Chair.

The following communications were read:—

1. "A note on Xylophaga præstans, Smith." By J. R. le B. Tomlin, M.A., F.E.S.

2. "Notes on the Coloration of the shell of Helix aspersa and of

Cochlicella barbara." By Hugh Watson.

The brown pigment in the shell of *Helix aspersa* is usually concentrated into spiral bands, homologous with those of *H. nemoralis*, etc.; although these bands are partly concealed, owing to the fact that the pale, opaque, substance of the shell crosses them in irregular streaks, instead of being confined to the zones between the dark bands, thus making the shell less conspicuous. But the stage of growth at which the pigment first becomes concentrated into distinct bands varies greatly. In some specimens the dark bands first appear before the middle of the second whorl, that is to say, close to the apex of the shell; in others, only the last whorl is distinctly banded. Moreover, breeding experiments show that this marked difference is hereditary; and that the mutation in which the bands develop late is apparently dominant to that in which

they develop early. Sometimes specimens are also found which are intermediate in appearance between these two mutations. This intermediate type, however, does not seem to be the result of a cross between individuals of the other two; experiments rather suggest that it is due to another dominant hereditary factor which tends to reduce the effect of the factor that retards the development of the bands, although only producing a noticeable difference in about 70 per cent of the shells. Further experiments, however, are needed for the elucidation of these problems.

3. "A note upon certain Fossils of the Upper Tertiary beds of the Dardanelles." By Paul Pallary.

Dr. Bowell exhibited photographs from micro-slides of the radulæ of Polita cellaria, Müll., and Limnæa palustris, Müll., originally mounted in the year 1852 and remounted this year—1920.

Dr. Boycott exhibited a series of maps used by Mr. Roebuck in

preparing the Census of Distribution of British Mollusca.

## ORDINARY MEETING. FRIDAY, 9TH APRIL, 1920.

J. R. LE B. TOMLIN, M.A., F.E.S., Vice-President, in the Chair. Mr. G. C. Spence was elected to membership of the Society. The following communications were read:

1. "Further notes on Radulæ." By Dr. E. W. Bowell, M.A.

In the Testacellidæ all our three species can be easily and definitely discriminated by means of the radula. central tooth is smallest in T. haliotidea, Drap.

In the genus Limax (sensu lato) we have adult forms (maximus, cinereo-niger, and flavus), a peculiar form (L. arborum), and nepionic forms (L. tenellus, Agriolimax agrestis, and A. lævis). The points of distinction and relationship of these were described in more detail.

The two Milaces are very similar, but apparently separable. (Only thirteen specimens of Milax gagates had been examined, however, this total including no very large specimens.)

The reintroduction of the generic name Zonites was urged; it is noted that Z. algirus is an adult form, while our larger species are nepionic; nitidulus, however, is of the algirus type. The striking smallness of the central uncus in lucidus, cellarius, rogersi, and alliarius is explained by the folding of the radula and the increase in size of the pleural unci. It does not appear to be a character calling for the formation of a separate genus. Z. scharffi is considered as probably typical cellarius, Z. hibernicus as a local race of cellarius. The previously described distinctions are well maintained, but are considered to be of less than specific importance.